

FEDERAL PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS
IN BPS-17 UNDER THE FEDERAL GOVERNMENT, 2001.

AGRICULTURE

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE: Attempt FIVE questions in all, including question No.8 which is COMPULSORY. All questions carry EQUAL marks.

1. Pakistan has experienced a good production of various agricultural crops like Wheat, Rice and Cotton in the recent past, but despite of this the farmers were generally not happy. What do you think could be the reasons of farmers' frustration? Suggest possible solution of such situation.
2. Genetic Engineering and Biotechnology are considered to be the sciences of 21st century. What is the current status of their role in agricultural research in Pakistan and what could be their possible contribution in future in this context. Comment.
3. What is biological Nitrogen fixation? Explain the factors affecting the biological N-fixation.
4. What are the basic laws of inheritance? Comment how these laws have helped in the process of crop improvement in agriculture.
5. Describe the principles of Insect Pest Control in agricultural crops.
6. Horticultural industry is an emerging industry in Pakistan; how do you comment on it?
7. Write short notes on the following:
 - (a) Population Problems of rural Pakistan
 - (b) Role of Organic matter in Soil
 - (c) Soil Erosion and Conservation
 - (d) Live stock as a component of agriculture.

COMPULSORY QUESTION

8. Write only the correct answer in the Answer Book. Do not reproduce the question.
 - (A)
 - (1) The economy of Pakistan is based on:
(a) Agriculture (b) Industry (c) Mineral resources (d) None of these.
 - (2) Which one of the following is major export commodity of Pakistan:
(a) Wheat (b) Cotton (c) Sugar (d) Rice (e) None of these.
 - (3) Sahiwal breed is a breed of:
(a) Buffalo (b) Cow (c) Sheep
(d) Goat (e) None of these
 - (4) Vertebrate pests of crops include:
(a) Insects (b) wild bores (c) spiders
(d) None of these

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- (5) Basmati is a type of:
(a) Wheat (b) Rice (c) Maize
(d) Sorghum (e) None of these
- (6) Sericulture means:
(a) Rearing of Honey bees (b) rearing of Silk worms
(c) Both of these (d) None of these
- (7) Gossypium hirsutum is the botanical name of:
(a) Sugarcane (b) Wheat (c) American Cotton
(d) Maize (e) None of these
- (8) Kharif crops include:
(a) Wheat (b) Cotton (c) Both of these
(d) None of these
- (9) Genetically Modified Organisms(GMO) is the term used for the organisms produced through the application of:
(a) Genetic Engineering (b) Mendelian Genetics
(c) None of these
- (10) The carrier of "cotton leaf curl virus" in Pakistan is considered to be:
(a) White fly (b) Jassids (c) American boll worm
(d) None of these
- (11) The process of synthesizing food by the plants in the presence of sun light is called as:
(a) Respiration (b) Photosynthesis (c) Fertilization
(d) None of these

(B) Fill in the blanks.

- (12) The date palm is monocotyledonous plant and belongs to family.....
- (13) Nitrogen is taken up by the plants in the form of.....
- (14) RGR stands for.....
- (15) Increased Vigour of a hybrid over the mean of its parents is called as.....
- (16) GDP stands for.....
- (17) Haploid number of Chromosomes of Desi Cotton is
- (18) refers to the size distribution of soil particles.
- (19)refers to the arrangement of soil particles.
- (20) IPM stands for.....
